THE SEQUOIA BARK

SEQUOIA & KINGS CANYON NATIONAL PARKS, CALIF.

VOL. SEVEN, NO. 4 JULY 11-23, 1980

Para aquellos visitantes que no estan familiarizadas con el ingles hay un folleto en espanol disponible en los Centros de Visitas de los Parques.

Deutsche Ubersetzung dieser Parkbroschure mit Karte ist in der Parkcentrale erhaltlich.

LADYBUGS FLY HOME

By Pamela Clarke

Ladybug, Ladybug
Fly away home.

And that is precisely what the ladybugs in the Sierra Nevada are doing: flying home.

This black-spotted orange beetle, Hippodamia convergens, has spent the entire winter season hibernating under the snow in tree stumps and under stones and dead leaves.

The California convergent beetle may now be seen in Sequoia and Kings Canyon National Parks in large groups preparing for their summer trip to the lower elevations.

The beetle begins its life when the eggs hatch in late spring and summer, in sunny valley fields.

The tiny larvae begin eating aphids, gorging themselves for perhaps three weeks, before entering the one-week pupal stage. Then, splitting their pupal skins, they emerge as hungry young adults, and will feed all summer long.

Migration from the valley to the mountains comes in autumn as lowland weather cools. These beetles may be found in massive swarms at elevations ranging from 2,000 to 7,000 feet.

The beetles then form small, tight clusters and bed down in forest litter beside streams. Here they rest until the warm weather of summer melts their winter bed of snow.

The ladybugs then congregate in large groups to return to their feeding grounds.

Hungrier than ever after traveling from the Sierra Nevada to the California lowlands, the ladybugs immediately seek their favorite entree, aphids. Although their preference is aphids, often they must settle for pollen.

An interesting phenomenon occurs in the ladybugs' eating habits. If they feed on aphids, and if the weather remains warm enough, the ladybugs will lay eggs. Pollen, however, mainly produces fat to tide them over their nine-month dormancy.

Once the ladybird beetles have fed in the lowlands they will breed and the cycle has been completed.

At one time, these ladybugs were collected in large numbers during their hibernation in the Sierra.

The beetles were then kept in cold storage, so they could be released as a biological controller of aphids, greenflies or scale insects.

This procedure was carried out for a number of years, but the results were disappointing. Since the insects were collected during hibernation, they had an instinct to migrate west upon awakening.

Consequently, when they were released in the coastal areas and in citrus orchards of lower elevations, most of the beetles must have flown off into the Pacific Ocean.

Other introductions of the ladybug for biological control have been made with more successful results.

A classic example of successful control occurred in California, where ladybird beetles were first introduced into the United States.

In 1888, when the cottony cushion scale insect was threatening to destroy the California citrus industry, ladybugs, Rodolia cardinalis, were imported from Australia.

Within two years, the imported ladybug had the destructive scale insect under complete control.

Although the ladybird beetle you find here in the Sierra Nevada has not proven to be successful as a means of biological control, their migration and hibernation remains to be a fascinating and beautiful sight in the park.

(Photo by Pamela Clarke)

SOLITARY LADYBUG. This black-spotted beetle will join others as they migrate to the California lowlands. Large numbers have spent the winter season under forest debris covered with snow in Sequoia and Kings Canyon National Parks.

SAVING ENERGY

The increasing cost of energy and transportation costs has a distinct impact on visitor-use patterns in Sequoia and Kings Canyon National Parks.

During the past several years, the total number of persons entering the park on an annual basis has declined by more than 20 percent. Other figures suggest, however, the actual use of the park has not declined. Fewer visitors are coming to these parks, but more are staying for longer periods of time.

The National Park Service is responding to these changing use patterns in several ways. One way is to design interpretive activities, which offer the visitor who stays in the park a number of days a variety of activities. A visitor should be able to stay for several days at a single-park lodge or campground and enjoy a wide variety of activities.

Special efforts will be made this year to have activities begin in the immediate vicinity of campgrounds and lodging areas.

Hopefully, you, the visitor, will be able to enjoy these parks without having to make heavy use of your vehicle.

Indeed, we encourage you to leave your car at your campsite or lodge and explore the parks on foot.

Inside this paper you will find activity schedules detailing opportunities for daytime walks and evening programs in your part of Sequoia and Kings Canyon. Join us for these activities, save energy and money, and make your stay in these parks even more enjoyable.

Listen To a Sequoia Bark

By tapping on a giant sequoia, you may not receive an answer, but you might be surprised at the hollow sound you will hear.

There are a number of trees in the park and many of the park visitors come to recognize some of the distinguishing characteristics belonging to each tree.

Next time you are strolling through a sequoia grove, why not gently rap your knuckle on the tree's bark. Then compare it with the sound you get from thumping a pine or fir.

The dull sound you get from thumping a sequoia results from its thick bark, which is full of holes. In a very true sense, the bark has more holes than tree.

The advantage of having thick porous bark provides excellent protection against the heat of fires. The mature sequoias have bark exceeding 15 inches, which is a good healthy coat.

You may also notice the bark of the sequoia is almost sap free. In terms of fire, this means a much slower burning process, which is an additional fire safeguard.

As you might have guessed, there is a reason for this. Sequoias are fire dependent trees. This means they require fire, in order to reproduce in numbers large enough to insure a new generation of trees.

Fire alters the environment in three major ways, which enhance sequoia reproduction.

Fire opens the forest canopy, allowing sunlight to reach the young seedlings. It burns the litter of the forest floor, so young seedlings are able to find mineral soil almost immediately. Finally, the temperature produced by the fire kills soil agents harmful to the struggling sequoias.

If we are to have seeds planted in a firebed, the parent trees need to be able to stand the rigors of fire.

The thick, porous bark serves as nature's asbestos coat, guarding the living tissues of the tree.

This is just a thumbnail sketch of the fire ecology and big tree story, but you can see the dull thump you heard when you tapped the tree has more of a punch to it than you may have thought.

ATTENTION CLIMBERS

A compendium of all Class 5 routes within Sequoia and Kings Canyon National Parks is being compiled. Anyone interested in contributing information should submit route descriptions, dates climbed, name and address to:

Climbs
c/o Ty Neff
P.O. Box 73
Sequoia National Park, CA 93262

The Sequoia Bark

Published for park visitors by the Sequoia Natural History Association and the Sequoia and Kings Canyon Hospitality Service. The Sequoia Natural History Association is a non-profit educational organization dedicated to securing and presenting authentic information on the natural and human history of Sequoia and Kings Canyon National Parks in cooperation with the National Park Service.

Sequoia Natural History Association
Ash Mountain, Box 10
Three Rivers, California 93271

Pamela Clarke, Editor

2023.009.0340 a

WHAT'S HAPPENING . . .

GIANT FOREST — LODGEPOLE — DORST

THIS SYMBOL IDENTIFIES ACTIVITIES AVAILABLE TO THE HANDICAPPED.

INFORMATION

LODGEPOLE VISITOR CENTER: Open daily 8:00 a.m. to 8:00 p.m. Uniformed personnel on duty to answer your questions. Wilderness permit desk open daily 7:00 a.m. to 8:00 p.m. Campground reservation desk open daily 10:00 a.m. to 9:00 p.m. Telephone (209) 565-3338. Campground reservations may not be made via telephone. Exhibits, publications and maps. Movies about the parks shown every half hour. Visitor Center telephone (209) 565-3364.

ACTIVITIES

DAILY:

3:30 a.m. TOKOPAH FALLS. Explore the beautiful Tokopah Valley and learn the glacial story of the high Sierra. Meet at the Lodgepole Market. 4 hours; 4 miles.

9:30 a.m. and 2:00 p.m. CONGRESS TRAIL. Stroll with a ranger through the world's finest sequoia grove. Meet at the General Sherman Tree. 2½ hours; 2 miles.

10:00 a.m.-3:00 p.m. CRYSTAL CAVE TOURS. Descend beneath the surface of the earth and discover the natural wonders of this marble cavern. Ranger-guided tours begin at the cave entrance each half hour between 10:00 a.m. and 11:30 a.m., and again from 12:30 p.m. until 3:00 p.m. Fifty cents entrance fee. 50-degree temperature within cave. The cave is located 13 miles west of Lodgepole at the end of the Crystal Cave Road. A one-half-mile trail connects the cave to the parking area. Allow one hour to get from Lodgepole to the cave entrance.

FRIDAY, JULY 11

8:30 a.m. TOKOPAH FALLS.

9:00 a.m. CHILDREN'S EXPLORATION PROGRAM. Join Eda Bankie for a young people's adventure in the natural world. Appropriate for children ages 8 through 12. Activities include nature walks and games, arts and crafts, and outdoor challenges. Children should meet at the Wolverton parking area. Activity ends at Lodgepole Visitor Center. Bring lunch. 6 hours.

9:30 a.m. CONGRESS TRAIL.

9:30 a.m. DORST NATURE WALK. Discover the natural system that shaped life in the red-fir forest. Meet at the Dorst Amphitheater parking area. 2 hours, 1 mile.

10:00 a.m.-3:00 p.m. CRYSTAL CAVE.

1:00 p.m. ESTHETIC APPRECIATION WALK. Join Park Artist Terece Lewis at Round Meadow and share her perceptions of the beauties in Sequoia Park. (No artistic ability required.) 2 hours, 1 mile.

1:00 p.m. PHOTO WALK. Explore the world of nature photography. Bring your camera. Meet at the Wolverton ski area. 2 hours, 1 mile.

1:00 p.m. TO THE WASHINGTON. Seek out the seldom-visited heart of the Giant Forest and discover the mighty Washington Tree. Meet at the Round Meadow parking area. 3½ hours, 3 miles.

2:00 p.m. CONGRESS TRAIL.

8:30 p.m. LODGEPOLE EVENING PROGRAM. Watch the life story of Sierra's antlered animals unfold, as Ranger Harold Basey presents "Discovering Sierra Deer." Meet at the Lodgepole Campground Amphitheater.

8:30 p.m. GIANT FOREST LODGE EVENING PROGRAM. Discover the role insects play in the pollination and seed dispersal of the Sierran wildflowers, as Ranger Ken Cottrell presents "Wildflowers and Insects." Meet at the Lodge Amphitheater, adjacent to the dining room.

8:30 p.m. DORST EVENING PROGRAM. Enjoy this specialty program, "An Awareness in Pictures," by Kodak expert Peter Parker. Meet at the Dorst Campground Amphitheater.

SATURDAY, JULY 12

8:30 a.m. TOKOPAH FALLS.

9:30 a.m. CONGRESS TRAIL.

10:00 a.m.-3:00 p.m. CRYSTAL CAVE.

1:00 p.m. ESTHETIC APPRECIATION WALK. Join Park Artist Terece Lewis at the Sherman Tree and share her perceptions of the beauties in Sequoia Park. (No artistic ability required.) 2 hours, 1 mile.

1:30 p.m. TO THE WASHINGTON. Seek out the seldom-visited heart of the Giant Forest and discover the mighty Washington Tree. Meet at the Round Meadow parking area. 3½ hours, 3 miles.

1:30 p.m. GEOLOGY WALK. Listen to the story the rocks tell about the origins of the Sierra Nevada. Meet at the Round Meadow parking area for this easy stroll. 3 hours, 1-2 miles.

2:00 p.m. CONGRESS TRAIL.

2:00 p.m. LODGEPOLE CHILDREN'S WALK. Involve your children in the wonders of nature. Suitable for children from ages 5 through 10. Meet at the Lodgepole Visitor Center. 1½ hours, 1 mile.

2:00 p.m. BACKPACK DEMONSTRATION. Learn the dos and don'ts of wilderness travel. Meet at the Lodgepole Visitor Center. 2 hours.

2:00 p.m. HAZELWOOD. Stroll through a dense grove of giant sequoia and learn of human efforts to preserve these unique trees. Meet at the Round Meadow parking area. 2 hours, 1 mile.

5:30 p.m. SUNSET ROCK. Bring wieners, buns, drinks, marshmallows, flashlights, cameras and jackets. Enjoy an evening of singing and hear **James Wolverton,** portrayed by Ranger Kenton Horner, tell of his pioneering experiences that led to the naming of the General Sherman Tree. Meet at the Round Meadow parking area. 3 hours, 1½ miles.

8:30 p.m. LODGEPOLE EVENING PROGRAM. Learn the glacial story of the Sierra when Ranger Jack Stitt presents "Rocks, Glaciers and Running Water." Meet at the Lodgepole Campground Amphitheater.

8:30 p.m. GIANT FOREST LODGE EVENING PROGRAM. Observe wildflowers of the changing elevations as Ranger Jim Carpenter presents "Footsteps Into Spring." Meet at the Lodge Amphitheater, adjacent to the dining room.

8:30 p.m. DORST EVENING PROGRAM. Explore the many seldom-seen mammals in the park and a few surprising facts on their life habits, as Ranger Mike Cook presents "The Amazing Wilderness of Mammals." Meet at the Dorst Campground Amphitheater.

SUNDAY, JULY 13

8:30 a.m. TOKOPAH FALLS.

9:00 a.m. GEOLOGY WALK. Listen to the story the rocks tell about the origins of the Sierra Nevada. Meet at the Round Meadow parking area for this easy stroll. 3 hours, 1-2 miles.

9:30 a.m. CONGRESS TRAIL.

10:00 a.m.-3:00 p.m. CRYSTAL CAVE.

1:00 p.m. LITTLE BALDY TRAIL. Ascend the granite dome of Little Baldy for a panoramic view of Sequoia Park. Meet at the Little Baldy Saddle, 6 miles north of Lodgepole on the Generals' Highway. 4 hours, 4 miles.

1:30 p.m. SOLDIERS' TRAIL HIKE. Explore the fascinating relationship between the giant sequoias and natural fire on this moderately strenuous forest hike. Meet at the Round Meadow parking area. 3½ hours, 4 miles.

2:00 p.m. CONGRESS TRAIL.

2:00 p.m. HAZELWOOD. Stroll through a dense grove of giant sequoia and learn of human efforts to preserve these unique trees. Meet at the Round Meadow parking area. 2 hours, 1 mile.

7:00 p.m. SEQUOIA YESTERDAYS. Meet **Shelley Simmons,** portrayed by Ranger Nancy Muleady, as she tells of her life as a 1920s semi-resident of the park. (Dramatization) Meet at the Lodgepole Market. 1 hour.

8:30 p.m. LODGEPOLE EVENING PROGRAM. Explore the interesting observations made along trails as Ranger Kenton Horner presents "Tales Along the Trails." Meet at the Lodgepole Campground Amphitheater.

8:30 p.m. GIANT FOREST LODGE EVENING PROGRAM. Take a glimpse into the life of frogs and toads as Ranger Harold Basey presents "Discovering Sierra Amphibians." Meet at the Lodge Amphitheater, adjacent to the dining room.

8:30 p.m. DORST EVENING PROGRAM. Learn the life cycle and ecology of the "Incomparable Giants" of the Sierra Nevada. Join Ranger Jim Carpenter at the Dorst Campground Amphitheater.

9:00 p.m. STAR TALK. Gaze at the stars and ponder the mysteries of the universe. Meet at the Lodgepole Market. 1 hour.

MONDAY, JULY 14

8:30 a.m. TOKOPAH FALLS.

9:30 a.m. CONGRESS TRAIL.

10:00 a.m.-3:00 p.m. CRYSTAL CAVE.

12:30 p.m. LOST GROVE. Explore the Dorst Creek Basin in search of sequoias. Meet at the Dorst Amphitheater parking area. 3 hours; 3 miles.

1:00 p.m. ESTHETIC APPRECIATION WALK. Join Park Artist Terece Lewis at the Round Meadow parking area and share her perceptions of the beauties in Sequoia Park. (No artistic ability required.) 2 hours, 1 mile.

1:30 p.m. GIANT FOREST CHILDREN'S WALK. Involve your children in the wonders of nature. Suitable for children from ages 5 through 10. Meet at the Round Meadow parking area. 1½ hours, 1 mile.

1:30 p.m. TO THE WASHINGTON. Seek out the seldom-visited heart of the Giant Forest and discover the mighty Washington Tree. Meet at the Round Meadow parking area. 3½ hours, 3 miles.

2:00 p.m. BACKPACK DEMONSTRATION. Learn the dos and don'ts of wilderness travel. Meet at the Lodgepole Visitor Center. 2 hours.

2:00 p.m. CONGRESS TRAIL.

2:00 p.m. RANGER WALK. Introduce yourself to the various aspects of ranger work. Meet at the Lodgepole Visitor Center. 2 hours, 1 mile.

5:30 p.m. SUNSET ROCK. Bring wieners, buns, drinks, marshmallows, flashlights, cameras and jackets. Enjoy an evening of singing and listen to the adventuresome life of an early-days **Sierra Club Woman,** portrayed by Ranger Margaret Kelley. Meet at the Round Meadow parking area. 3 hours, 1½ miles.

8:30 p.m. LODGEPOLE EVENING PROGRAM. Enjoy the specialty program, "An Awareness in Pictures," by Kodak expert Peter Parker. Meet at the Lodgepole Campground Amphitheater.

8:30 p.m. GIANT FOREST LODGE EVENING PROGRAM. Find out the interesting history which lies behind the construction of the High Sierra Trail as Ranger Bill Tweed presents "Mt. Whitney or Bust." Meet at the Lodge Amphitheater, adjacent to the dining room.

8:30 p.m. DORST EVENING PROGRAM. Take an intimate look at some of the interesting natural features of Sequoia National Park as Ranger Elizabeth Carpenter presents "On the Loose." Meet at the Dorst Campground Amphitheater.

TUESDAY, JULY 15

8:15 a.m. BIRD WALK. Seek out the varied bird life of the Sierran forests with Ranger Harold Basey. Binoculars will be helpful. Meet at the Wolverton parking area. 3 hours, 1-2 miles.

8:30 a.m. TOKOPAH FALLS.

9:00 a.m. PHOTO WALK. Join a professional photographer from Kodak and learn about nature photography. Meet at the Crescent Meadow parking area. 2 hours, 1 mile.

9:30 a.m. CONGRESS TRAIL.

10:00 a.m.-3:00 p.m. CRYSTAL CAVE.

12:00-2:00 p.m. SOLAR DEMONSTRATION. Take a moment during this 2-hour period to meet Ranger Vaughn Folkman and his amazing solar cooker! Meet at the Lodgepole Visitor Center.

1:00 p.m. CRESCENT MEADOW. Visit one of the meadows that gave Giant Forest its distinct character and learn the meadow story. Meet at the Crescent Meadow parking area. 3 hours, 2-3 miles.

1:30 p.m. LODGEPOLE CHILDREN'S WALK. Involve your children in the wonders of nature. Suitable for children from ages 5 through 10. Meet at the Lodgepole Visitor Center. 1½ hours, 1 mile.

2:00 p.m. BACKPACK DEMONSTRATION. Learn the dos and don'ts of wilderness travel. Meet at the Lodgepole Visitor Center. 2 hours.

2:00 p.m. CONGRESS TRAIL.

8:30 p.m. LODGEPOLE EVENING PROGRAM. See the interaction of the Sierra's weather and the environment as Ranger Jeff Lee presents "With the Weather." Meet at the Lodgepole Campground Amphitheater.

8:30 p.m. GIANT FOREST LODGE EVENING PROGRAM. Enjoy the specialty program, "An Awareness in Pictures," by Kodak expert Peter Parker. Meet at the Lodge Amphitheater, adjacent to the dining room.

8:30 p.m. DORST EVENING PROGRAM. Relax beneath the stars as Ranger Vaughn Folkman presents a special program, "Tooth, Fang and Claw." Meet at the Dorst Campground Amphitheater.

WEDNESDAY, JULY 16

8:30 a.m. TOKOPAH FALLS.

9:00 a.m. CHILDREN'S ADVENTURE PROGRAM. Join Eda Bankie for a young people's adventure in the natural world. Appropriate for children ages 5 through 8. Activities include arts and crafts, story telling, short hikes, and nature games. Children should meet at Wolverton parking area. Activity ends at Lodgepole Visitor Center. Bring lunch. 6 hours.

9:30 a.m. CONGRESS TRAIL.

9:30 a.m. DORST NATURE WALK. Discover the natural system that shaped life in the red-fir forest. Meet at the Dorst Amphitheater parking area. 2 hours, 1 mile.

10:00 a.m.-3:00 p.m. CRYSTAL CAVE.

1:00 p.m. BACKPACK DEMONSTRATION. Learn the dos and don'ts of wilderness travel. Meet at the Lodgepole Visitor Center. 2 hours.

1:30 p.m. SOLDIERS' TRAIL HIKE. Explore the fascinating relationship between the giant sequoias and natural fire on this moderately strenuous forest hike. Meet at the Round Meadow parking area. 3½ hours, 4 miles.

1:30 p.m. DORST CHILDREN'S WALK. Involve your children in the wonders of nature. Suitable for children from ages 5 through 10. Meet at the Dorst Amphitheater parking area. 1½ hours, 1 mile.

2:00 p.m. CONGRESS TRAIL.

8:30 p.m. LODGEPOLE EVENING PROGRAM. Discover the role insects play in the pollination and seed dispersal of the Sierran wildflowers, as Ranger Ken Cottrell presents "Wildflowers and Insects." Meet at the Lodgepole Campground Amphitheater.

8:30 p.m. GIANT FOREST LODGE EVENING PROGRAM. Spend a relaxing evening with Ranger Bill Tweed as he shares the four seasons through photographs of the Sierra Nevada. Meet at the Lodge Amphitheater, adjacent to the dining room.

8:30 p.m. DORST EVENING PROGRAM. Enjoy a spec-

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GIANT FOREST — LODGEPOLE — DORST

ACTIVITIES (continued)

tacular sunset view as you listen to the words of a Kaweah Colonist, portrayed by Vaughn Folkman. Meet Ranger Jack Stitt at the Dorst Amphitheater Campground. ½ mile.

THURSDAY, JULY 17

8:30 a.m. TOKOPAH FALLS.
9:30 a.m. CONGRESS TRAIL.
10:00 a.m.-3:00 p.m. CRYSTAL CAVE.
1:00 p.m. ESTHETIC APPRECIATION WALK. Join Park Artist Terece Lewis at Round Meadow parking area and share her perceptions of the beauties in Sequoia Park. (No artistic ability required.) 2 hours, 1 mile.
1:00 p.m. BACKPACK DEMONSTRATION. Learn the dos and don'ts of wilderness travel. Meet at the Lodgepole Visitor Center. 2 hours.
2:00 p.m. HAZELWOOD. Stroll through a dense grove of giant sequoia and learn of human efforts to preserve these unique trees. Meet at the Round Meadow parking area. 2 hours, 1 mile.
2:00 p.m. HIDDEN MEADOW. Discover a hidden secret in the forests near Dorst Campground. Meet at the Dorst Campground Entrance Station. 2 hours, 1 mile.
2:00 p.m. CONGRESS TRAIL.
2:30 p.m. LODGEPOLE CHILDREN'S WALK. Involve your children in the wonders of nature. Suitable for children from ages 5 through 10. Meet at the Lodgepole Visitor Center. 1½ hours, 1 mile.
8:30 p.m. LODGEPOLE EVENING PROGRAM. Take a look at the relationship of man and the wildlife of Sequoia Park. Ranger Nancy Chow will present the "Peaceable Kingdom" at the Lodgepole Campground Amphitheater.
8:30 p.m. GIANT FOREST LODGE EVENING PROGRAM. Discover the role insects play in the pollination and seed dispersal of the Sierran wildflowers, as Ranger Ken Cottrell presents "Wildflowers and Insects." Meet at the Lodge Amphitheater, adjacent to the dining room.
8:30 p.m. DORST EVENING PROGRAM. Discover the fascinating story of the sequoias as Ranger Dave Thomson presents "Bark, Tannin and Big Trees." Meet at the Dorst Campground Amphitheater.

FRIDAY, JULY 18

8:30 a.m. TOKOPAH FALLS.
9:00 a.m. MUIR GROVE. Visit the Muir Grove of the giant sequoias and learn the story of these magnificent trees. Meet at the Muir Grove trailhead near the Group Camp Area in Dorst Campground. Bring lunch. 5 hours, 4 miles.
9:00 a.m. PHOTO TALK. Listen as a Kodak representative explains the basics of nature photography. Meet at the Lodgepole Amphitheater Campground. 1 hour.
9:00 a.m. CHILDREN'S EXPLORATION PROGRAM. Join Eda Bankie for a young people's adventure in the natural world. Appropriate for children ages 8 through 12. Activities include nature walks and games, arts and crafts, and outdoor challenges. Children should meet at the Wolverton parking area. Activity ends at Lodgepole visitor Center. Bring lunch. 6 hours.
9:30 a.m. DORST CREEK ADVENTURE. Get your feet wet as you explore Dorst Creek. Meet at the Dorst Amphitheater. 2-3 hours, 2 miles.
9:30 a.m. CONGRESS TRAIL.
9:30 a.m. LODGEPOLE CHILDREN'S WALK. Involve your children in the wonders of nature. Suitable for children from ages 5 through 10. Meet at the Lodgepole Visitor Center. 1½ hours, 1 mile.
10:00 a.m.-3:00 p.m. CRYSTAL CAVE.
1:00 p.m. TO THE WASHINGTON. Seek out the seldom-visited heart of the Giant Forest and discover the mighty Washington Tree. Meet at the Round Meadow parking area. 3½ hours, 2 miles.
1:30 p.m. INDIAN TALK. Visit the site of an abandoned Indian encampment and join Ranger Ken Cottrell as you use almost-forgotten skills to make tools and prepare food. Meet at the Round Meadow parking area. 3 hours, ½ mile.
1:30 p.m. ENERGY WALK. Soak up the sun while you learn about its effect on living things. Meet at the Lodgepole Visitor Center. 2 hours, 1 mile.
2:00 p.m. CONGRESS TRAIL.
7:00 p.m. SEQUOIA YESTERDAYS. Meet old **James Wolverton** and learn the story of early cattle ranching in the Kaweah watershed. (Dramatization) Meet at the Lodgepole Market. 1 hour.
8:30 p.m. LODGEPOLE EVENING PROGRAM. Find out how life in the Sierra Nevada is powered by the sun as Ranger Armando Quintero presents "From Sunbeam to Sunbeam." Meet at the Lodgepole Campground Amphitheater.
8:30 p.m. GIANT FOREST LODGE EVENING PROGRAM. Watch the life story of Sierra's antlered animals unfold as Ranger Harold Basey presents "Discovering Sierra Deer." Meet at the Lodge Amphitheater, adjacent to the dining room.
8:30 p.m. DORST EVENING PROGRAM. Enjoy this specialty program, "An Awareness in Pictures," by Kodak expert Peter Parker. Meet at the Dorst Campground Amphitheater.

SATURDAY, JULY 19

8:30 a.m. TOKOPAH FALLS.
8:30 a.m. HEATHER LAKE. Put on your boots and climb four steep miles to an alpine lake. Strenuous. Bring lunch. Meet at Wolverton parking area. 7 hours, 8 miles.
9:30 a.m. CONGRESS TRAIL.
9:30 a.m. MAP READING AND TRAIL FINDING. Find out how to use topographic maps and find your way in the wilderness. Meet at the Dorst Campground parking area. 2 hours, ½ mile.
10:00 a.m.-noon. SOLAR DEMONSTRATION. Take a moment during this two-hour period to meet Ranger Vaughn Folkman and his amazing solar cooker!
10:00 a.m. COFFEE AND CONVERSATION. Join Ranger Norm Allen for a morning cup of coffee. Learn about the operation of Sequoia and Kings Canyon. Meet at the Giant Forest Lodge Amphitheater. Coffee provided. 2 hours.
10:00 a.m.-3:00 p.m. CRYSTAL CAVE.
1:00 p.m. ESTHETIC APPRECIATION WALK. Join Park Artist Terece Lewis at the Lodgepole Market and share her perceptions of the beauties in Sequoia Park. (No artistic ability required.) 2 hours, 1 mile.
1:00 p.m. BACKPACK DEMONSTRATION. Learn the dos and don'ts of wilderness travel. Meet at the Lodgepole Visitor Center. 2 hours.
1:30 p.m. LODGEPOLE CHILDREN'S WALK. Involve your children in the wonders of nature. Suitable for children from ages 5 through 10. Meet at the Lodgepole Visitor Center. 1½ hours, 1 mile.
2:00 p.m. HAZELWOOD. Stroll through a dense grove of giant sequoia and learn of human efforts to preserve these unique trees. Meet at the Round Meadow parking area. 2 hours, 1 mile.
2:00 p.m. CONGRESS TRAIL.
3:00 p.m. PHOTO WALK. Explore the world of nature photography. Bring your camera. Meet at the Wolverton parking area. 2 hours, 1 mile.
8:30 p.m. LODGEPOLE EVENING PROGRAM. Relax beneath the stars as Ranger Harold Basey discusses a park favorite, "Bears." Meet at the Lodgepole Campground Amphitheater.
8:30 p.m. GIANT FOREST LODGE EVENING PROGRAM. See the life of Sierra's pioneer naturalist come alive as Ranger Margaret Kelley presents "John Muir's Legacy." Recorded interpretations by Carl Sharsmith. Meet at the Lodge Amphitheater, adjacent to the dining room.
8:30 p.m. DORST EVENING PROGRAM. Explore the varying landscapes as Ranger Dave Thomson presents "Desert Sand to Alpine Crest." Meet at the Dorst Campground Amphitheater.

SUNDAY, JULY 20

8:30 a.m. TOKOPAH FALLS.
9:30 a.m. LITTLE BALDY TRAIL. Ascend the granite dome of Little Baldy for a panoramic view of Sequoia Park. Meet at the Little Baldy Saddle, 6 miles north of Lodgepole on the Generals' Highway. 4 hours, 4 miles.
9:30 a.m. DORST NATURE WALK. Discover the natural system that shaped life in the red-fir forest. Meet at the Dorst Amphitheater parking area. 2 hours, 1 mile.
9:30 a.m. GIANT FOREST CHILDREN'S WALK. Involve your children in the wonders of nature. Suitable for children from ages 5 through 10. Meet at the Round Meadow parking area. 1½ hours, 1 mile.
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1:00 p.m. ESTHETIC APPRECIATION WALK. Join Park Artist Terece Lewis at the Sherman Tree and share her perceptions of the beauties in Sequoia Park. (No artistic ability required.) 2 hours, 1 mile.
1:30 p.m. SOLDIERS' TRAIL HIKE. Explore the fascinating relationship between the giant sequoias and natural fire on this moderately strenuous forest hike. Meet at the Round Meadow parking area. 3½ hours, 4 miles.
1:30 p.m. LODGEPOLE CHILDREN'S WALK. Involve your children in the wonders of nature. Suitable for children from ages 5 through 10. Meet at the Lodgepole Visitor Center. 1½ hours, 1 mile.
2:00 p.m. HAZELWOOD. Stroll through a dense grove of giant sequoia and learn of human efforts to preserve these unique trees. Meet at the Round Meadow parking area. 2 hours, 1 mile.
2:00 p.m. BACKPACK DEMONSTRATION. Learn the dos and don'ts of wilderness travel. Meet at the Lodgepole Visitor Center. 2 hours.
2:00 p.m. CONGRESS TRAIL.
8:30 p.m. LODGEPOLE EVENING PROGRAM. Take a different look at the precious fluid we call water, as Ranger Kenton Horner presents "Water in the Sierra." Meet at the Lodgepole Campground Amphitheater.
8:30 p.m. GIANT FOREST LODGE EVENING PROGRAM. Delve into the fascinating bird life you might see during your park visit. Ranger Harold Basey will present "Discovering Sierra Birds" at the Lodge Amphitheater, adjacent to the dining room.
8:30 p.m. DORST EVENING PROGRAM. Enjoy the fascinating history of the giant sequoia. Ranger Norm Allen will present "The Big Tree Story" at the Dorst Campground Amphitheater.

MONDAY, JULY 21

8:30 a.m. TOKOPAH FALLS.
8:45 a.m. LIFE IN THE WILD. Join Ranger Harold Basey for a field exploration of Sierran wildlife and wildlife management techniques. Meet at the Lodgepole Visitor Center. 3 hours, 2 miles.
9:00 a.m. CHILDREN'S ADVENTURE PROGRAM. Join Eda Bankie for a young people's adventure in the natural world. Appropriate for children ages 5 through 8. Activities include arts and crafts, story telling, short hikes, and nature games. Children should meet at the Wolverton parking area. Activity ends at Lodgepole Visitor Center. Bring lunch. 6 hours.
9:30 a.m. CONGRESS TRAIL.
10:00 a.m.-3:00 p.m. CRYSTAL CAVE.
2:00 p.m. CONGRESS TRAIL.
2:00 p.m. HAZELWOOD. Stroll through a dense grove of giant sequoia and learn of human efforts to preserve these unique trees. Meet at the Round Meadow parking area. 2 hours, 1 mile.
8:30 p.m. LODGEPOLE EVENING PROGRAM. Enjoy this specialty program, "An Awareness in Pictures," by Kodak expert Peter Parker. Meet at the Lodgepole Campground Amphitheater.
8:30 p.m. GIANT FOREST LODGE EVENING PROGRAM. Discover how and why people travel through the wilderness as Ranger Kenton Horner presents "Freedom of the Hills." Meet at the Lodge Amphitheater, adjacent to the dining room.
8:30 p.m. DORST EVENING PROGRAM. Let Ranger Margaret Kelley help you find your place in space as she presents "You're a Bit of the Sun." Meet at the Dorst Campground Amphitheater.

TUESDAY, JULY 23

8:15 a.m. BIRD WALK. Seek out the varied bird life of the Sierran forests with Ranger Harold Basey. Binoculars will be helpful. Meet at the Wolverton parking area. 3 hours, 1-2 miles.
8:30 a.m. TOKOPAH FALLS.
9:00 a.m. PHOTO WALK. Join a professional photographer from Kodak and learn about nature photography. Meet at the Crescent Meadow parking area. 2 hours, 1 mile.
9:30 a.m. CONGRESS TRAIL.
10:00 a.m.-3:00 p.m. CRYSTAL CAVE.
1:00 p.m. DORST NATURE WALK. Discover the natural system that shaped life in the red-fir forest. Meet at the Dorst Amphitheater parking area. 2 hours, 1 mile.
1:00 p.m. SOLDIERS' TRAIL HIKE. Explore the fascinating relationship between the giant sequoias and natural fire on this moderately strenuous forest hike. Meet at the Round Meadow parking area. 3½ hours, 4 miles.
1:00 p.m. ESTHETIC APPRECIATION WALK. Join Park Artist Terece Lewis at the Round Meadow parking area and share her perceptions of the beauties in Sequoia Park. (No artistic ability required.) 2 hours, 1 mile.
1:30 p.m. TO THE WASHINGTON. Seek out the seldom-visited heart of the Giant Forest and discover the mighty Washington Tree. Meet at the Round Meadow parking area. 3½ hours, 3 miles.
2:00 p.m. CONGRESS TRAIL.
8:30 p.m. LODGEPOLE EVENING PROGRAM. See the many moods of Sequoia Park as Ranger Margaret Kelley presents "Through the Seasons." Meet at the Lodgepole Campground Amphitheater.
8:30 p.m. GIANT FOREST LODGE EVENING PROGRAM. Enjoy this specialty program, "An Awareness in Pictures," by Kodak expert Peter Parker. Meet at the Lodge Amphitheater. adjacent to the dining room.
8:30 p.m. DORST EVENING PROGRAM. Observe wildflowers of the changing elevations as Ranger Jim Carpenter presents "Footsteps Into Spring." Meet at the Dorst Campground Amphitheater.

WEDNESDAY, JULY 23

8:30 a.m. TOKOPAH FALLS.
9:30 a.m. DORST NATURE WALK. Discover the natural system that shaped life in the red-fir forest. Meet at the Dorst Amphitheater parking area. 2 hours, 1 mile.
9:30 a.m. CONGRESS TRAIL.
10:00 a.m.-3:00 p.m. CRYSTAL CAVE.
1:30 p.m. CRESCENT MEADOW. Visit one of the meadows that gave the Giant Forest its distinct character and learn the meadow story. Meet at the Crescent Meadow parking area. 3 hours, 2-3 miles.
12:30 p.m. LODGEPOLE CHILDREN'S WALK. Involve your children in the wonders of nature. Suitable for children from ages 5 through 10. Meet at the Lodgepole Visitor Center. 1½ hours, 1 mile.
2:00 p.m. BACKPACK DEMONSTRATION. Learn the dos and don'ts of wilderness travel. Meet at the Lodgepole Visitor Center. 2 hours.
2:00 p.m. CONGRESS TRAIL.
8:30 p.m. LODGEPOLE EVENING PROGRAM. Relax beneath the stars as Ranger Vaughn Folkman presents "Tooth, Fang and Claw." Meet at the Lodgepole Campground Amphitheater.
8:30 p.m. GIANT FOREST LODGE EVENING PROGRAM. Join Ranger Brian Moss as he simplifies bird identification at Sequoia National Park in "For the Birds." Meet at the Lodge Amphitheater, adjacent to the dining room.
8:30 p.m. DORST EVENING PROGRAM. See the life of Sierra's pioneer naturalist come alive as Ranger Margaret Kelley presents "John Muir's Legacy." Recorded interpretations by Carl Sharsmith. Meet at the Dorst Campground Amphitheater.

2023.004.0340 c

What's happening . . . Sequoia National Park

MINERAL KING AREA

THIS SYMBOL IDENTIFIES ACTIVITIES AVAILABLE TO THE HANDICAPPED.

INFORMATION

MINERAL KING RANGER STATION: Information, wilderness permits, books, and maps. First Aid. Telephone Mineral King Number 1.

ACTIVITIES

FRIDAY, JULY 11

1:00 p.m. ASPEN FLAT. Explore the friendly meadows and vistas of upper Mineral King Valley. Discover a soda spring. Meet at the ranger station for this easy walk. We will form car pools for travel to the trailhead. 3 hours, 3 miles.

8:00 p.m. MINERAL KING CAMPFIRE. Join Ranger John Satnat for a fireside talk about the bears of Mineral King. Bring marshmallows. 1 hour.

SATURDAY, JULY 12

1:00 p.m. WHAT IT'S ALL ABOUT. Introduce yourself to the beauties of Mineral King. Meet at the ranger station for this easy guided walk which explores the natural and human stories that have made Mineral King the place it is today. 2 hours, 2 miles.

8:00 p.m. MINERAL KING CAMPFIRE. Join Ranger Nancy Fuller for a fireside talk about Mineral King. The Mineral King Campfire Circle is adjacent to the ranger station. Bring marshmallows. 1 hour.

SUNDAY, JULY 13

1:00 p.m. WE ARE NOT THE FIRST. Look for traces of Mineral King's first visitors. Meet at the ranger station for this easy guided walk. 2 hours, 1 mile.

8:00 p.m. MINERAL KING CAMPFIRE. Join Ranger John Satnat for a fireside talk about the bears of Mineral King. The Mineral King Campfire Circle is adjacent to the ranger station. Bring marshmallows. 1 hour.

MONDAY, JULY 14

1:00 p.m. SILVER! Trace the search for the precious metals of Mineral King and the history of the searchers. Meet at the ranger station for this easy walk. 2 hours, 2 miles.

8:00 p.m. MINERAL KING CAMPFIRE. Join Ranger Nancy Fuller for a fireside talk about Mineral King. The Mineral King Campfire Circle is adjacent to the ranger station. Bring marshmallows. 1 hour.

TUESDAY, JULY 15

9:00 a.m. UP TO THE EMPIRE. Climb the rugged slopes of Empire Mountain via the Timber Gap trail to the ruins of Mineral King's most important historic mine. Bring lunch and water. Meet at the ranger station. We will form a car pool to travel to the trailhead. 6 hours, 7 miles. (Strenuous)

WEDNESDAY, JULY 16

1:00 p.m. WILDFLOWERS! Explore the wildflower beauty of Mineral King. Meet at the ranger station for this easy guided walk. 2 hours, 2 miles.

8:00 p.m. MINERAL KING CAMPFIRE. Relive turn-of-the-century times in Mineral King as Ranger Marlene Butler portrays a Mineral King summer resident of 1910. (Dramatic presentation.) The Mineral King Campfire Circle is adjacent to the ranger station. 1 hour.

THURSDAY, JULY 17

9:00 a.m. WHITE CHIEF. Hike up White Chief Canyon to the upper meadows. Discover the old White Chief Mine, and marvel at the wonderful alpine scenery. Bring lunch. Meet at the ranger station. We will form car pools to travel to the trailhead. 6 hours, 7 miles.

FRIDAY, JULY 18

1:00 p.m. LET'S TALK GEOLOGY. Discover the fascinating story of Mineral King's rocks. Meet at the ranger station for this easy stroll. 2 hours, ½ mile.

8:00 p.m. MINERAL KING CAMPFIRE. Join Ranger Nancy Fuller for a fireside talk about Mineral King. The Mineral King Campfire Circle is adjacent to the ranger station. Bring marshmallows. 1 hour.

SATURDAY, JULY 19

1:00 p.m. ASPEN FLAT. Explore the friendly meadows and vistas of upper Mineral King Valley. Discover a soda spring. Meet at the ranger station for this easy walk. We will form car pools for travel to the trailhead. 3 hours, 3 miles.

8:00 p.m. MINERAL KING CAMPFIRE. Join Ranger Marlene Butler for a fireside talk about the ecology of fire. The Mineral King Campfire Circle is adjacent to the ranger station. Bring marshmallows. 1 hour.

SUNDAY, JULY 20

1:00 p.m. WHAT IT'S ALL ABOUT. Introduce yourself to the beauties of Mineral King. Meet at the ranger station for this easy guided walk, which explores the natural and human stories that have made Mineral King the place it is today. 2 hours, 2 miles.

8:00 p.m. MINERAL KING CAMPFIRE. Meet a silver miner who participated in Mineral King's historic silver rush, and hear of the excitement of early days in Mineral King. (Dramatic presentation.) The Mineral King Campfire Circle is adjacent to the ranger station. 1 hour.

MONDAY, JULY 21

1:00 p.m. GONE BUT NOT FORGOTTEN. Drift back through time to relive the heyday of Mineral King. Meet at the ranger station for this easy walk which explores the human stories of Mineral King. 2 hours, 2 miles.

8:00 p.m. MINERAL KING CAMPFIRE. Join Ranger Nancy Fuller for a fireside talk about Mineral King. The Mineral King Campfire Circle is adjacent to the ranger station. Bring marshmallows. 1 hour.

TUESDAY, JULY 22

9:00 a.m. TIMBER GAP. Climb up the Timber Gap trail and marvel to the alpine views from the protected grove of giant foxtail pines. Strenuous. Bring lunch. Meet at the ranger station. We will form car pools for travel to the trailhead. 6 hours, 6 miles.

WEDNESDAY, JULY 23

1:00 p.m. SILVER! Trace the search for the precious metal of Mineral King and the history of the searchers. Meet at the ranger station for this easy walk. 2 hours, 2 miles.

8:00 p.m. MINERAL KING CAMPFIRE. Join Ranger Marlene Butler for a fireside talk about Mineral King. The Mineral King Campfire Circle is adjacent to the ranger station. Bring marshmallows. 1 hour.

Born Free and Wild

By Marlene Butler

It is always a delight to see wildlife in a natural setting; a bear crossing a stream or a deer browsing on meadow plants. Such sights are not uncommon in Sequoia National Forest.

Even still, visitors during the 1979 summer season in Mineral King were often surprised by the sight of two fawns prancing alongside the East Fork of the Kaweah River, as it winds through Cold Springs Campground.

The fawns, Tawny and Moochie, were orphans adopted, through the California Department of Fish and Game, by James Parks of Hanford.

The young deer were brought to the Parks family last spring. When the family made their annual trip to Mineral King for the summer, they brought the animals along with them.

Here in the Mineral King Valley, the deer could join the local herd of California mule deer and learn to browse native plants.

The Parkses' mountain cabin provided a choice environment for raising Tawny and Moochie.

There is a patchwork of vegetation created, in part, by avalanches. Large trees are removed from the slide paths of heavy snows and open spaces remain where low shrubs and brush grow.

Favorite browse of the deer, such as chamise and ceanothus, grows vigorously in these disturbed areas.

The deer enjoy nibbling on the leaves and twigs of these plants, while near the safe cover of the dense forest or tall meadow grass.

Streamside communities of fern, aspen and willow add to the variety of the mule deer diet.

Since separation from their mothers, Tawny and Moochie were bottle fed.

The Parkses prepared the infants' formula from a nutritious recipe of calf manna and rich cream, blended together until the substance resembled a milkshake.

In order to wean the fawns from the bottle, Jim Parks would play the role of the "momma" deer and demonstrate the tastiness of green leaves and twigs.

In the evenings, Tawny and Moochie were taken to a meadow where other deer were browsing.

In this way they could become familiar with their own kind and learn the ways of the wild.

The Parkses hoped, in time, a doe would feel protective toward the spotted fawns and take them into her own care.

When the summer season drew to a close, the Mineral King herd began its annual movement downslope to warmer climate.

It became evident Tawny and Moochie were not yet ready to join the migration. Instead the fawns returned to Hanford with the Parks family.

Fortunately, the deer were not confined to a fenced backyard in the valley. Instead, Tawny and Moochie took permanent residence at Fort Roosevelt.

Jim Parks is principal of the Roosevelt Elementary School and chief overseer of the fort. The fort walls, constructed of telephone poles, enclose several ecosystems that imitate different California environments, for instance the arid desert, the rolling foothills and the forests of the Sierra.

Tawny and Moochie were allowed to wander freely over these grounds and to nip at the fort's growing plants.

As happens in the true environments represented at the fort, death came with the winter and took Moochie, who had developed a case of the "scours."

This sad incident could easily have caused the Parkses to cling more tightly to Tawny, changing the deer from a wild animal into a family pet.

MULE DEER

However, the California Department of Fish and Game chose the young deer's family well.

The Parkses kept an attitude of great responsibility as they resisted pampering Tawny. Jim and his family took precautions to prevent the deer from becoming overly trusting of, or dependent upon, humans.

This spring Tawny was released. The young deer was mature enough to be taken from Fort Roosevelt to an open range.

Like most concerned parents, Jim and Sue Parks were reluctant to see Tawny go. To no one's surprise, the wild-deer herd accepted the newcomer naturally, since the fawn had lost its spots.

With the melting of winter snows, the expanding range of the local deer herd will again include the high valley of Mineral King and once more visitors will be delighted by the sight of these beautiful Sierran mammals.

2023.009.034.0d

What's happening . . . Kings Canyon National Park

GRANT GROVE AREA

THIS SYMBOL IDENTIFIES ACTIVITIES AVAILABLE TO THE HANDICAPPED.

INFORMATION

GRANT GROVE VISITOR CENTER: Open daily 8:00 a.m. to 8:00 p.m. Information, exhibits, publications, maps and a free orientation slide program. Telephone (209) 335-2315.

ACTIVITIES

NOTE: All ranger-guided activities, unless otherwise indicated, meet at the Grant Grove Amphitheater parking lot with transportation. To conserve energy car pools will be formed for transportation to trailheads. The parking lot is located in Sunset Campground.

Campfire Program: Evening campfire programs are held each evening at 8:30 in the amphitheater located in Sunset Campground.

Indian Life: Meet and talk with Gladys as she relates stories of Western Mono Indian life daily except Monday and Tuesday. At 10:00 a.m. and 2:00 p.m. Wednesday thru Friday she will discuss village life and structure. Saturdays only at 10:00 a.m. and 2:00 p.m. see an acorn cooking demonstration. Ramada is located near post office.

FRIDAY, JULY 11

9:00 a.m. TREES OR TIMBER. Walk with the ranger as you examine the forest's response to logging. 3 hours, 1½ miles.

10:00 a.m. STORIES OF INDIAN VILLAGE LIFE. At ramada adjacent to post office.

2:00 p.m. STORIES OF INDIAN VILLAGE LIFE. Ramada adjacent to post office.

3:00 p.m. GRANT TREE WALK. Enjoy a leisurely walk through big trees with a ranger naturalist and discover a little bit more about these giants. Meet at Grant Tree parking lot. 1 hour.

8:30 p.m. EVENING PROGRAM. "Through the Seasons." A slide program tracing the ever-changing colors of the seasons. Amphitheater.

SATURDAY, JULY 12

9:00 a.m. SEQUOIAS GALORE. Learn the facts about the role of fire in the life of the giants. 3 hours, 2 miles.

10:00 a.m. & 2:00 p.m. ACORN COOKING DEMONSTRATION. Adjacent to post office.

1:00 p.m. DEAD GIANT MYSTERY. Step back in time as you walk by meadow and over dale to an old mill pond. 2 hours, 1 mile.

8:30 p.m. EVENING PROGRAM. "Two Fingers of Redeye." A slide story of early loggers and teamsters of the area. Amphitheater.

SUNDAY, JULY 13

7:30 a.m. BIRD WALK. Discover with the ranger the birdlife of the Park. 2-3 hours, 1 mile.

10:00 a.m. GRANT TREE WALK. Enjoy a leisurely walk through the giants with a ranger and find out more about the big trees. Meet at the Grant Tree parking lot. 1 hour.

10:00 a.m. & 2:00 p.m. STORIES OF INDIAN VILLAGE LIFE. At ramada adjacent to post office.

3:00 p.m. KIDDIE WALK. Kids between 5 and 12 years are invited to sign up in the Visitor Center for an hour walk and exploration. Meet at the flag pole. Limited number.

4:10 p.m. CONCERT UNDER THE TREES. Music of the great artists for your enjoyment. Amphitheater.

8:30 p.m. EVENING PROGRAM. "The Air the Angels Breathe." A backpack trip involving slides, music and your imagination. Amphitheater.

MONDAY, JULY 14

11:00 a.m. BACKPACKING DEMONSTRATION. Discover the How, What, Why and When of backpacking. Visitor Center auditorium.

1:00 p.m. TREES OR TIMBER. Walk with the ranger as you discover the forest's response to logging. 3 hours, 2 miles.

4:10 p.m. CONCERT UNDER THE TREES. Enjoy the music of the masters. Amphitheater. 1 hour.

8:30 p.m. EVENING PROGRAM. "Wildlife of Kings Canyon." A slide presentation of various wildlife found in the Park. Amphitheater.

TUESDAY, JULY 15

9:00 a.m. ROCKS AND FALLING WATER. A walk to a mountain stream to enjoy the many sights and sounds of nature. 3 hours, 2 miles.

1:00 p.m. NORTH GROVE. Follow the ranger into a grove of trees seldom visited. 3 hours. 2 miles.

4:10 p.m. CONCERT UNDER THE TREES. Enjoy the music of the masters. Amphitheater. 1 hour.

8:30 p.m. EVENING PROGRAM. "Igneous and Ice." A slide program which covers the effects of ice in the sculpture of the Sierra Nevadas. Amphitheater.

WEDNESDAY, JULY 16

9:00 a.m. PANORAMIC VISTAS. Enjoy the many panoramic views as you learn how the Sierras were formed. 3 hours, 2 miles.

10:00 a.m. & 2:00 p.m. STORIES OF INDIAN VILLAGE LIFE. At ramada adjacent to post office.

1:00 p.m. DEAD GIANT MYSTERY. Step back in time as you walk beside a meadow, and over dale to an old mill pond. 2 hours, 1 mile.

4:10 p.m. CONCERT UNDER THE TREES. Enjoy the music of the masters. Amphitheater. 1 hour.

8:30 p.m. EVENING PROGRAM. "A Close Look at the Giants." A slide program which discusses the factors affecting the big trees. Amphitheater.

THURSDAY, JULY 17

9:00 a.m. BIG BALDY. Introduce yourself to new vistas as the ranger discusses the many facets of forest life. 3 hours, 3 miles.

10:00 a.m. & 2:00 p.m. STORIES OF INDIAN VILLAGE LIFE. At ramada adjacent to post office.

1:00 p.m. SEQUOIAS GALORE. Learn the facts about the role of fire in the life of the Big Trees. 2 miles, 3 hours.

8:30 p.m. EVENING PROGRAM. "An Awareness in Pictures." A slide program presented by Kodak with helpful photography hints. Amphitheater.

FRIDAY, JULY 18

9:00 a.m. DIM TRAIL HIKE. Help the ranger find the trail to the overlook and beautiful vistas. 3 hours, 1½ miles.

10:00 a.m. & 2:00 p.m. STORIES OF INDIAN VILLAGE LIFE. At ramada adjacent to post office.

1:00 p.m. TREES OR TIMBER. Walk with the ranger and examine the effects of logging on the forest. 3 hours, 2 miles.

8:30 p.m. EVENING PROGRAM. "Through the Seasons." A slide program tracing the changing colors of flowers as the seasons change. Amphitheater.

SATURDAY, JULY 19

9:00 a.m. DEAD GIANT MYSTERY. Step back in time as you walk beside a meadow and over dale to an old mill pond. 2 hours, 1 mile.

10:00 a.m. & 2:00 p.m. ACORN COOKING DEMONSTRATION. Adjacent to post office.

2:00 p.m. KIDDIE WALK. Kids 5 to 12 years sign up in the Visitor Center for an hour's walk and exploration. Meet at the flagpole. Limited number.

3:00 p.m. PUPPET SHOW FOR KIDS. Listen to what the "Little People" have to say. Visitor Center Auditorium. ½ hour.

8:30 p.m. EVENING PROGRAM. "The Longest Spring." A slide presentation covering changes in plant communities as spring moves into the mountains. Amphitheater.

SUNDAY, JULY 20

7:30 a.m. BIRD WALK. Learn the birds of the Park. 2 hours, 1 mile.

10:00 a.m. & 2:00 p.m. STORIES OF INDIAN VILLAGE LIFE. At ramada adjacent to post office.

1:00 p.m. NORTH GROVE. Walk along a seldom-used trail and discover the many facets of forest wildlife. 3 hours, 2 miles.

4:10 p.m. CONCERT UNDER THE TREES. Enjoy the music of the masters. Amphitheater. 1 hour.

8:30 p.m. EVENING PROGRAM. "Fire and the Big Trees." A slide program which discusses the role of fire in Sequoia Ecology. Amphitheater.

MONDAY, JULY 21

1:00 p.m. TREES OR TIMBER. Walk with the ranger and discover the affects of logging on the forest. 3 hours, 2 miles.

4:10 p.m. CONCERT UNDER THE TREES. Relax and listen to the music of the masters. Amphitheater. 1 hour.

8:30 p.m. EVENING PROGRAM. "Wildlife in Kings Canyon." A slide program covering the major wildlife of the Park. Amphitheater.

TUESDAY, JULY 22

9:00 a.m. DIM TRAIL HIKE. Help the ranger find the trail to the overlook featuring many scenic vistas. 3 hours, 1 mile.

1:00 p.m. SEQUOIAS GALORE. Learn the facts about the role of fire in the Sequoia Groves. 3 hours, 2 miles.

4:10 p.m. CONCERT UNDER THE TREES. Enjoy the music of the masters. Amphitheater. 1 hour.

8:30 p.m. EVENING PROGRAM. "Igneous and Ice." A slide program covering the role of ice in the sculpturing of the Sierra Nevadas. Amphitheater.

WEDNESDAY, JULY 23

9:00 a.m. TREES OR TIMBER. Walk with the ranger and discover the forest's response to logging. 3 hours, 2 miles.

10:00 a.m. & 2:00 p.m. STORIES OF INDIAN VILLAGE LIFE. At the ramada adjacent to post office.

1:00 p.m. ROCKS AND FALLING WATER. Walk to a mountain stream to enjoy the many sights and sounds of nature. 3 hours, 3 miles.

4:10 p.m. CONCERT UNDER THE TREES. Enjoy the music of the masters. Amphitheater. 1 hour.

8:30 p.m. EVENING PROGRAM. "A Close Look at the Giants." A slide program which discusses the factors affecting the Big Trees. Amphitheater.

Sharing Culture

It might seem the practice of traditional and native customs is a dying activity in our rapidly-moving technological society, but some are still being observed at Grant Grove village area in the Kings Canyon National Park.

Gladys McKinney, a Mono Indian, and Barbara Bill, a Wutchumnie and Mono Indian, share their culture with park visitors at 10:00 a.m. and 2:00 p.m. Wednesday through Sunday.

Here, you will be able to observe the artistry of basket construction and traditional food preparation, while talking to these interesting ladies.

They are happy to share their knowledge of their heritage. Customs, religion, recreation — the way of life of the original Californians — are all very interesting.

Gladys and Barbara utilize native plants for basket construction. The plants are normally harvested in the autumn and include the bark of the redbud, the root of the braken ferm, white root from the sedge, sourberry sticks, and sticks from the deer brush.

These materials are skillfully woven and joined to form a number of basket types with an array of patterns.

The art of basket making is passed down through the Indian families. The knowledge of the highly-skilled art of basket weaving is traditionally kept within the Indian tribes, and it is for this reason that classes are not taught on the subject.

Designs woven into the baskets and cradles often denote various symbols, such as friendship or a child's gender.

The Indian cradle, known as the hoop in the Mono Indian language, may have a 'V' or a straight line design woven into it to symbolize a boy. A girl's cradle is designed with a diamond or a zig-zag pattern.

Acorns from various oak trees provided the staple food for the Native Californians. Food preparation involved numerous steps before the meal was served. A visit with Barbara and Gladys will familiarize you with these procedures. They can also explain various uses of other native plants used for food and seasonings.

A must on your agenda, while visiting the Grant Grove area, is a visit to our Native California Indian Life Display.

CULTURAL DEMONSTRATION. Park visitor observes Gladys McKinney prepare soap root at Grant Grove in Kings Canyon National Park.

2023.009.0340e

What's happening . . . Kings Canyon National Park

CEDAR GROVE AREA

THIS SYMBOL IDENTIFIES ACTIVITIES AVAILABLE TO THE HANDICAPPED.

INFORMATION

CEDAR GROVE RANGER STATION: Open daily 8:00 a.m. to 8:00 p.m. Books, maps, wilderness permits and first aid available. All Cedar Grove wilderness permits must be obtained at the ranger station. Exhibits nearby. Telephone — Cedar Grove No. 6.

ACTIVITIES

FRIDAY, JULY 11

8:00 a.m. ZUMWALT MEADOW. Join Ranger Susan Ford and explore a Sierran meadow. Meet at Roads End Kiosk. 3 hours; 3 miles.

9:00 a.m. RIDE A HORSE. Ride with Ranger Scott Isaacson and discover the historical role the horse has played in Kings Canyon. Meet at the Pack Station. 3 hours.

1:00 p.m. KANAWYER'S PLACE. Meet with Ranger Janet Fink and explore the Kanawyer's Flat area. Meet at the Roads End Kiosk. 2 hours; 1 mile.

2:00 p.m. SHEEP CREEK. Hike with Ranger Glynis Burns and discover the home of the water ouzel. 2 hours; 2 miles.

8:30 p.m. EVENING PROGRAM. Join Ranger Julie Dreher for a Campfire Program at the Amphitheater. 1 hour.

SATURDAY, JULY 12

7:00 a.m. BIRD WALK. Become acquainted with the birds of Cedar Grove with Ranger Scott Isaacson. Meet at Roads End. 2 hours, 2 miles.

9:00 a.m. NATURE DETECTIVES. Join Ranger Susan Ford and explore some of nature's mysteries. Designed for children ages 6-12, accompanied by an adult. Meet at the Cedar Grove Amphitheater. 2 hours, 1 mile.

1:00 p.m. WILDFLOWER WALK. Explore the folklore and early uses for the plants of Kings Canyon, with Ranger Amy Eisenberg. Meet at Roads End. 2 hours, 2 miles.

1:30 p.m. WET AND WILD. Explore the banks of the Kings River with Ranger Janet Fink and learn how it shapes and influences life in the Kings Canyon. Meet in front of the Cedar Grove Lodge. 2 hours, 2 miles.

6:30 p.m. THE CLIMBER. Come and meet **Norman Clyde,** legendary Sierran mountaineer. Listen to the stories of his numerous first ascents and see why he is a most unusual character. (Dramatization) Meet at the Cedar Grove Amphitheater. 1 hour, ½ mile.

8:30 p.m. EVENING PROGRAM. "The Magical Black Pot." Enjoy the fascinating history and use of the Dutch Oven from Ranger Logan Carter. Cedar Grove Amphitheater.

SUNDAY, JULY 13

9:00 a.m. CHILDREN'S WALK. Join Ranger Amy Eisenberg and learn about the Monachi Indians of Kings Canyon and the games they played. Suited for ages 6-12, accompanied by an adult. Meet in front of the Cedar Grove Lodge. 2 hours, 1 mile.

9:00 a.m. IN SEARCH OF. Ranger Logan Carter will show you how to use a map and compass in finding a "fire" and an "injured hiker." Suited for those 14 and older. Meet at Roads End. 2 hours.

1:00 p.m. FIRE IN THE CANYON. Explore old and new burned areas with Ranger Susan Ford and learn fire's role in the natural plan. Meet in front of the Cedar Grove Lodge. 2 hours, 2 miles.

1:30 p.m. WIND IN THE WILLOWS. Join Ranger Julie Dreher and gain some hints to aid in tree identification. You may also learn why some species grow in one location and not in another. Meet at Roads End. 2 hours, 2 miles.

6:30 p.m. THE ADVENTURESS. Come and meet **Mrs. Bolton Coit Brown** for whom Lucy's Foot Pass was named. Listen to her many adventures over high mountain passes. (Dramatization) Meet at the Cedar Grove Amphitheater. 1 hour, ½ mile.

8:30 p.m. EVENING PROGRAM. "Land Above the Trees." Join Ranger Scott Isaacson and explore the alpine areas of the High Sierra. Discover the plants and animals and their specific adaptations to live in the highest mountain areas. Cedar Grove Amphitheater.

MONDAY, JULY 14

9:30 a.m. PINE NEEDLE HEAVEN. Watch as Ranger Glynis Burns demonstrates how to make coiled baskets using pine needles and other natural fibers found in the Sierra. Cedar Grove Amphitheater. 2 hours.

1:00 p.m. WHEEL AND SPROCKET. Use an alternative form of transportation as Ranger Julie Dreher rides with you to some of the lesser known sights of Cedar Grove. Rental bikes are available at the Cedar Grove Gas Station. Meet at the ranger station. Bring water. 3 hours, 6 miles.

1:30 p.m. FIRE IN THE CANYON. Explore old and new burned areas with Ranger Janet Fink and learn fire's role in the natural plan. Meet in front of the Cedar Grove Lodge. 2 hours, 2 miles.

6:30 p.m. THE MINER. Listen as **Thomas Keough** tells of his adventures in constructing the trail over Kearsarge Pass. (Dramatization) Meet at the Cedar Grove Amphitheater. 1 hour, ½ mile.

8:30 p.m. EVENING PROGRAM. To be announced at the Cedar Grove Ranger Station.

TUESDAY, JULY 15

8:00 a.m. BOOTS AND SADDLES. Join Ranger Logan Carter on a horseback ride and learn about the role horses played in the history of Kings Canyon. Reservations should be made at the Pack Station. Under 17 must be accompanied by an adult. Group size limited. 2 hours.

1:00 p.m. CLOSE TO THE GROUND. Join Ranger Janet Fink on a nature walk designed especially for children ages 7-12. Meet in front of the Cedar Grove Lodge. 2 hours, 1 mile.

1:30 p.m. BACKPACK DEMONSTRATION. Watch and listen as Ranger Julie Dreher demonstrates what to take and how to keep your feet happy and your body warm on day hikes, overnighters, and extended backcountry trips. Cedar Grove Amphitheater. 2 hours.

8:30 p.m. EVENING PROGRAM. "A Kings Canyon Pot Pourri." Ranger Glynis Burns presents a slide presentation on a trip through Kings Canyon. The program will emphasize resources, recreation and safety. Cedar Grove Amphitheater.

WEDNESDAY, JULY 16

10:00 a.m. THE MAGICAL BLACK POT. Watch Ranger Logan Carter demonstrate the historical and present use of the Dutch Oven. Cedar Grove Amphitheater. 2 hours.

2:00 p.m. WET AND WILD. Explore the banks of the Kings River with Ranger Fawn Bauer and learn how the river shapes and influences life in the Kings Canyon. Meet in front of the Cedar Grove Lodge. 2 hours, 2 miles.

4:00 p.m. MULE PACKING DEMONSTRATION. Learn how mules are packed for trips into the backcountry from an expert packer, Tracy Terzian. Cedar Grove Amphitheater. 1 hour.

8:30 p.m. EVENING PROGRAM. "An Awareness Through Pictures." Kodak presents a view of Sequoia and Kings Canyon National Parks through the lens of an experienced camera. Cedar Grove Amphitheater.

THURSDAY, JULY 17

9:00 a.m. CLOSE TO THE GROUND. Join Ranger Fawn Bauer on this nature walk designed especially for children ages 4-10. Must be accompanied by an adult. Meet at the Cedar Grove Amphitheater. 2 hours, 1 mile.

1:00 p.m. SHEEP CREEK. Join Ranger Susan Ford and ascend to Don Cecil Trail to the "Fern Grotto Falls" on Sheep Creek. Meet at the Cedar Grove Amphitheater. 3 hours, 2 miles.

2:00 p.m. TREES ARE OUR FRIENDS. With Amy Eisenberg discover the trees of Kings Canyon and the role that they play. Meet at the Cedar Grove Amphitheater. 2 hours, 2 miles.

3:30 p.m. EVENING PROGRAM. "The Canyon People." The customs and lifestyle of the Monachi Indians of Kings Canyon will be presented by Ranger Amy Eisenberg. Cedar Grove Amphitheater. 3 hours, 2 miles.

FRIDAY, JULY 18

9:00 a.m. KANAWYERS' PLACE. Search the Kanawyers Flat area for the remains of an early Kings Canyon settlement with Ranger Fawn Bauer. Meet at Roads End. 2 hours, 1 mile.

1:00 p.m. FIRE IN THE CANYON. Explore old and new burned areas with Ranger Glynis Burns and learn fire's role in the natural plan. Meet in front of the Cedar Grove Lodge. 2 hours, 2 miles.

3:00 p.m. BOOTS AND SADDLES. Join Ranger Susan Ford on a horseback ride and learn about the role horses played in the history of Kings Canyon. Reservations should be made at the Pack Station. Children under 17 must be accompanied by an adult. Group size limited. 2 hours.

6:30 p.m. THE ADVENTURESS. Come and meet **Mrs. Bolton Coit Brown** for whom Lucy's Foot Pass was named. Listen as she recounts her many adventures over high mountain passes. (Dramatization) Meet at the Cedar Grove Amphitheater. 1 hour, ½ mile.

8:30 p.m. EVENING PROGRAM. "Habits and Habitats." Join Ranger Janet Fink and take a look at the mammals of Sequoia and Kings Canyon National Parks. Cedar Grove Amphitheater.

SATURDAY, JULY 19

7:00 a.m. OUR FINE FEATHERED FRIENDS. Join Ranger Glynis Burns for a look at some of the interesting features of the birds in Kings Canyon. Meet at Roads End. 2 hours, 2 miles.

10:00 a.m. WHEEL AND SPROCKET. Shed your dependence on the automobile and ride your bicycle to Roaring River Falls and learn about the natural history of Kings Canyon from Ranger Fawn Bauer. Rental bikes available at Cedar Grove Gas Station. Bring sack lunch. 3 hours, 6 miles.

1:00 p.m. ZUMWALT MEADOW. Join Ranger Scott Isaacson and explore the river, forest and meadow environments of a Sierran meadow. Meet at Roads End. 3 hours, 3 miles.

1:00 p.m. SHEEP CREEK. Ascend the Don Cecil Trail with Ranger Amy Eisenberg and visit the "Fern Grotto Falls" on Sheep Creek. Meet at the Cedar Grove Amphitheater. 3 hours, 2 miles.

6:30 p.m. THE CLIMBER. Come and meet **Norman Clyde,** legendary Sierran mountaineer. Listen to the stories of his numerous first ascents and see why he is a most unusual character. (Dramatization) Meet at the Cedar Grove Amphitheater. 1 hour, ½ mile.

8:30 p.m. EVENING PROGRAM. "Reading the Resource." Join Ranger Julie Dreher for a slide presentation on the challenge of balancing resource preservation and use in the national parks, from their origin to modern times. Cedar Grove Amphitheater.

SUNDAY, JULY 20

9:00 a.m. WILDFLOWER WALK. Discover the folklore and early uses for the plants of Kings Canyon with Ranger Amy Eisenberg. Meet at Roads End. 2 hours, 2 miles.

9:00 a.m. PINE NEEDLE HEAVEN. Watch Ranger Glynis Burns demonstrate how to make coiled baskets using pine needles and other natural fibers found in the Sierras. Cedar Grove Amphitheater. 3 hours.

1:00 p.m. KANAWYERS' PLACE. Search the Kanawyers Flat area for the remains of an early Kings Canyon setlement with Ranger Ron Terry. Meet at Roads End. 2 hours, 1 mile.

1:30 p.m. BACKPACKING DEMONSTRATION. Watch and listen as Ranger Julie Dreher demonstrates what to take and how to keep your feet happy and your body warm on day hikes, overnighters and extended trips. Cedar Grove Amphitheater. 2 hours.

6:30 p.m. VIOLA KANAWYER, MOUNTAIN WOMAN. Come and see **Viola Kanawyer** and hear about the experiences she had while running a pack station and hotel on Copper Creek. (Dramatization) Meet at the Cedar Grove Amphitheater. 2 hour, ½ mile.

8:30 p.m. EVENING PROGRAM. "Living Waters." Relax and enjoy the beauty and magic of water and explore its essential role in our environment with Ranger Susan Ford. Cedar Grove Amphitheater.

MONDAY, JULY 21

9:00 a.m. HOTEL CREEK. Join Ranger Julie Dreher and climb the north wall of the Kings Canyon on the Hotel Creek Trail. Discover the varied life zones along the way. Meet at the Cedar Grove Amphitheater. Bring water. 3 hours, 2 miles.

1:00 p.m. NATURE DETECTIVES. Join Ranger Susan Ford and explore some of nature's mysteries. Designed for children ages 6-12, accompanied by an adult. Meet at the Cedar Grove Amphitheater. 2 hours, 1 mile.

2:00 p.m. WET AND WILD. Explore the banks of the Kings River with Ranger Janet Fink and learn how it shapes and influences life in the Kings Canyon. Meet in front of the Cedar Grove Lodge.

6:30 p.m. THE ADVENTURESS. Come and meet **Mrs. Bolton Coit Brown** for whom Lucy's Foot Pass was named. Listen to her many adventures over high mountain passes. (Dramatization) Meet at the Cedar Grove Amphitheater. 1 hour, ½ mile.

8:30 p.m. EVENING PROGRAM. "The Canyon People." The customs and lifestyles of the Monachi Indians of Kings Canyon will be presented by Ranger Amy Eisenberg. Cedar Grove Amphitheater.

TUESDAY, JULY 22

9:00 a.m. ZUMWALT MEADOW. Discover the stream, forest and meadow environments of Zumwalt Meadow with Ranger Julie Dreher. Meet at the Zumwalt Meadow Parking Area. 3 hours, 3 miles.

9:00 a.m. MIST FALLS. Seek the beauty of Kings Canyon's grandest waterfall with Ranger Janet Fink. Meet at Roads End. Moderately strenuous. Bring your lunch. 6 hours, 8 miles.

1:00 p.m. FIRE IN THE CANYON. Explore old and new burned areas with Ranger Glynis Burns and learn fire's role in the natural plan. Meet in front of the Cedar Grove Lodge. 2 hours, 2 miles.

8:30 p.m. EVENING PROGRAM. "Footprints Through the Canyon." Join Ranger Ron Terry for a slide presentation on past inhabitants and travelers in Kings Canyon. Cedar Grove Amphitheater.

WEDNESDAY, JULY 23

9:00 a.m. THE DUSTY TRAIL. Walk with Ranger Logan Carter and learn of the historical importance of the Don Cecil Trail. Meet at the Cedar Grove Amphitheater. 3 hours, 2 miles.

10:00 a.m. WIND IN THE PINES. Join Ranger Julie Dreher and gain some hints to aid in tree identification. You may also learn why some species grow in one location but not in another. Meet at the Cedar Grove Amphitheater. 2 hours, 1 mile.

3:00 p.m. BOOTS AND SADDLES. Take a horseback ride with Ranger Fawn Bauer and learn about the role horses played in the history of Kings Canyon. Reservations should be made at the pack station. Those under 17 must be accompanied by an adult. Group size limited. 2 hours.

8:30 p.m. EVENING PROGRAM. "An Awareness Through Pictures." Kodak presents a view of Sequoia and Kings Canyon National Parks through the lens of an experienced camera. Cedar Grove Amphitheater.

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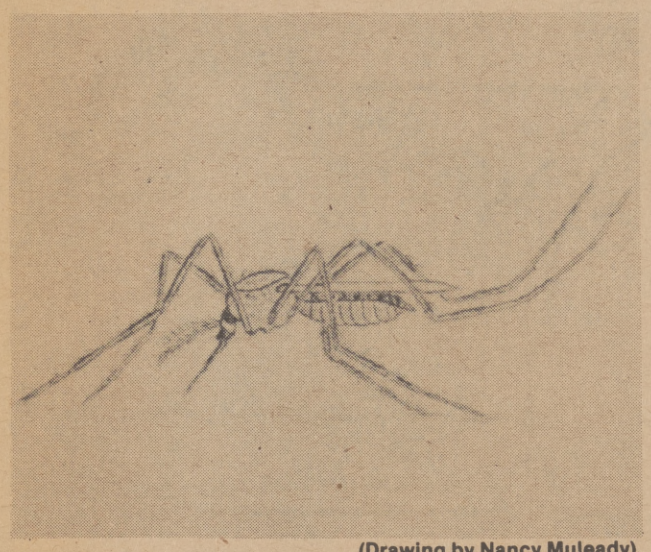
FEMALES ON THE PROWL



(Drawing by Nancy Muleady)

What attracts mosquitoes to the human body?

We know that mosquitoes are out for blood, literally. Yet that doesn't tell us why the pesky devils go after some people while others escape the stings.

An unlucky victim, it is now known, gives off odors a mosquito likes.

That may not be the only reason, says the U.S. Department of Agriculture, but a new study has left little doubt that the body's odors are heady stuff for female mosquitoes on the prowl.

A whiff of skin odors attracted mosquitoes in research conducted by USDA and University of Florida scientists. They used an instrument called an olfactometer to measure the mosquito's reaction to airborne odors.

One trap, in the olfactometer, had clean air, and a second trap the skin odors from a person's arm. Carbon dioxide and water were added to balance the airstream in each trap.

On releasing 100 female mosquitoes, researchers found the odor-laden air trap bagged some 60 mosquitoes. And, the clean air trap failed to attract one mosquito.

As to other reasons why mosquitoes attack, one is that the body's warmth may have a special appeal. Another simply is that the body is there, as a human target.

According to the scientists, their research is aimed at identifying the "human-produced organic chemicals" that attract mosquitoes to humans.

Thus, in the tests, other clues were removed, such as seeing the person and sensing the infrared emissions and warm air rising in convestion currents from the body.

Other stimuli — including odors, moisture, carbon dioxide, and lactic acid coming from the skin — seem to overlap in "mosquito attraction hierarchy," the scientists suggest as a result of their research.

Magcial Black Pot

By Logan Carter

As a group of Cedar Grove campers watched, a Ranger poked around in the ashes of the campfire pit. What was he looking for? Finally he found a curved wire handle and gave it a yank. Out came a dirty cast iron pot with coals and soil heaped upon the lid. The dirty covering was carefully removed and the audience braced themselves for what surely must be inside. Their worried expressions vanished as the lid rose and the aroma reached their senses. Before them was a stew done to perfection with each ingredient ready to crumble at the slightest touch of a fork. These visitors had just witnessed an event that has taken place many times throughout the early days of the west. Mountain men, settlers, sheepherders, and mule skinners have pioneered the use of the magical black pot: the Dutch Oven.

To relive a part of cooking history around your campfire, here are some secrets to Dutch oven success. First, you must secure a real campfire Dutch oven. It should have legs on the bottom to keep it a little above the coals, and a flat lid with a lip around the edge. The lip prevents coals from falling off the top of the oven. The next step is the most important. You must seal the cast iron by seasoning it to gain proper sweetness and achieve a dingy look. To accomplish this, liberally coat the Dutch oven with shortening, lard, or bacon grease. Place the oven in a hot stove oven until the grease starts to smoke.

Turn off the heat and allow to completely cool. Now you have an instrument you can use to fry, boil, stew, bake or slow cook with. After using a Dutch oven it should be wiped out and a thin coat of grease added before storing. Sorry gals, but soap, water, and scouring pads will destroy the seasoning and ruin your image as a pure Dutch oven cook.

While all this talk on the care and feeding of a Dutch oven has been going on, the Ranger has been busy. He fried some strips of bacon in the bottom of two ovens. In one, he placed some cut-up fresh peaches, a dash of corn starch and cinnamon, and dumped a yellow cake mix on top of the boiling syrup. In the other, he placed small balls of sourdough. Coals were placed under the oven and a greater amount heaped on top of the lids. Ten to 15 minutes later the audience was looking at golden brown biscuits and a complete peach cobbler.

"Well folks," the ranger was saying, "check hardware stores that feature old-fashioned cookware, look through the outdoor cooking section of a bookstore, gather a good supply of wood, and you, too, can be ready to experience the wonders of the magical black pot."

Through Different Eyes

As you stand before the massive General Sherman Tree and your gaze extends upward to take in its magnificent size, you probably get a feeling of great power and strength.

When you enjoy the crystal blue water of a mountain lake, you might experience a feeling of peacefulness.

Did you ever wonder why you receive different emotional responses from different forms of nature?

These questions and many more may be answered by Park Artist Terece Lewis, as she presents the Esthetic Appreciation Walks and Talks.

Whether you are a professional artist or just like to view nature's beauty through different perspectives, these activities could be valuable additions to your park visit.

Terece will explain elements of design and why they have various emotional effects on the individual.

This area of the Sierra Nevada has been blessed with an abundance of natural beauty. Why not learn to appreciate its wonder through different eyes; through the eyes of an artist.

Backcountry Travel

Wilderness permits are required for overnight backcountry travel in Sequoia and Kings Canyon National Parks.

Permits may be obtained at Ash Mountain, Lodgepole, Cedar Grove, Grant Grove and Mineral King. Go to the station closest to your point of departure.

Trailhead entry quotas will be enforced this summer in a continuing effort to prevent overuse, which results in damage to the backcountry.

Quota reservations may be made by mail or telephone at the Sierra District Ranger's Office, Sequoia and Kings Canyon National Parks, Three Rivers, CA 93271, (209) 565-3306.

Energy Out the Door

We are often reminded the ultimate source of all energy on the planet Earth is the sun.

Except for a few very important sources of radioactivity native to the Earth, we are entirely dependent on the sun for the variety of energy forms we use.

For nearly two hundred years, we, the descendants of those who began the industrial revolution, have depended upon the sun in the form of fossil fuels.

Coal and petroleum are forms of fossilized sunlight. Yet, they are only two forms of solar energy.

The motion of the tides, the howl of the wind, the power of water flowing downhill, the activity of photosynthesis, the stored energy in wood, and the heat and light of direct solar radiation, are all aspects of this planet's solar income.

An important bit of physics underlying all this, however, is that when we speak of "energy," we often do not invest it with any particular "form."

When we speak of "matter," we usually have some "form in mind. That form may be a black liquid, oil, or a green solid, a plant leaf.

What the physicist sees, however, is two inseparable concepts: energy and matter. He tells us that energy can neither be created nor destroyed.

This is also true of matter, but with one important difference. Matter exists in nature in a cyclic manner, energy does not.

Matter remains in the system (a leaf grows, dies and decays, then the same material will be taken up in other leaves), whereas energy flows into a system and exists as stored energy (sunlight coming into a leaf is stored as sugars, etc.)

Much has been said about the proper care of energy and matter. We know it costs less to recycle an aluminum can than to purify the ore to make a new one.

We also know that a broken cycle, energy flow, can leave nothing in the end. Matter in its cycle will always yield more matter, though often in a different form (petroleum burns to form carbon dioxide and water, giving off heat).

In a world where massive demands are placed upon both energy systems, fuels, and matter systems, mineral resources, the conservation-minded person must think like the physicist.

He must see the cyclic nature of matter and the "broken cycle" of unwise energy use. He must also go on to see the combination of energy and matter.

Each time we set out to harness an energy flow, remember that it is also invested in some material and will often be recycled into some form which is less rich in energy.

In the process, though we have recycled the material, we have redirected the energy right out the back door.

Photo by Bill Tweed

COMMON MADIA. This common wildflower is found in the foothills and at moderate elevations of the Sierra. The yellow blossom, somewhat resembling the wild sunflower, is often seen lining the roadside, in the early morning and late afternoon hours, but by midday the park visitor will have difficulty in finding the showy flower heads. This is because the tips of the ray flower curl inward and most are closed by mid-morning. By late afternoon, they reopen. Early bloomers may be found in the grasslands of the valley and foothills below 3,000 feet. Higher elevations, in forest openings of the forests, are blessed with its beauty between June and August.

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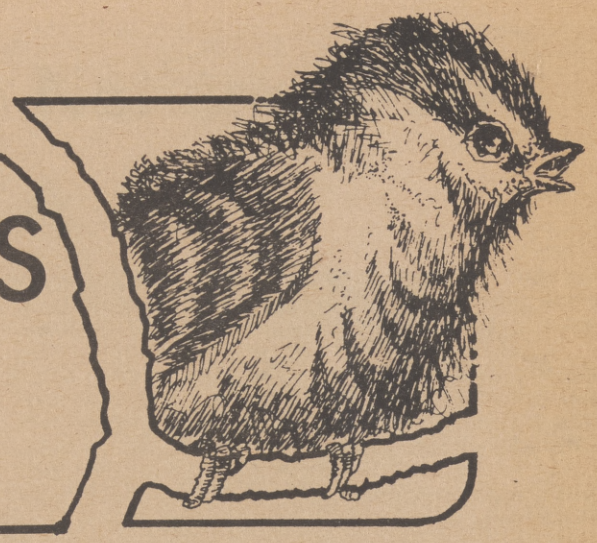
SERVICES and FACILITIES

PROVIDED BY

SEQUOIA AND KINGS CANYON HOSPITALITY SERVICE



SEQUOIA NATIONAL PARK

GIANT FOREST LODGE

Accommodations: Open all year. Facilities include a number of room types ranging from simple rustic housekeeping units without bath to deluxe cabins and motel units with bath. During winter months only with bath units are open. All lodge units are within walking distance of dining facilities and gift shops.

Reservation Office: Open all year 8:00 a.m. to 5:00 p.m. Telephone (209) 565-3373.

Lodge Dining Room and Cocktail Lounge: Open daily from mid-May through October 6th. Breakfast from 7:00 a.m. to 9:30 a.m. Dinner 5:30 p.m. to 8:00 p.m. Meals are served buffet style. Buffet includes an excellent salad bar and choice of entrees. Cocktail lounge hours from 5:30 p.m. to midnight.

Lodge Gift Shop: Open 9:00 a.m. to 8:00 p.m. Offers a selection of souvenir and handicraft items.

GIANT FOREST VILLAGE

Cafeteria: Open all year. Breakfast from 7:00 a.m. to 11:00 a.m. Lunch from 11:30 a.m. to 4:00 p.m. Dinner from 4:30 p.m. to 8:30 p.m. All items priced ala carte. Box lunches are available if requested by 6:00 p.m. the day before required.

Studio Gift Shop: Open daily May 17 through September 21, 10:00 a.m. to 6:00 p.m. Features selected handicrafts from throughout the United States including jewelry, photographs, pottery and wood creations.

Market: Open year round. Summer hours 8:00 a.m. to 8:00 p.m. Offers a varied selection of groceries, ice, camper supplies, fishing equipment and licenses and non-prescription drugs.

Cafeteria Gift Shop: Open all year. Summer hours from 9:00 a.m. to 8:00 p.m. Selected souvenirs, film and publications.

Showers: Available to the public 8:00 a.m.-5:00 p.m. Located near the Camp Kaweah linen room.

LODGEPOLE

Chevrol Service Station: Located 4 miles north of Giant Forest Village. Summer hours from 8:00 a.m. to 7:00 p.m. Supreme, lowlead and unleaded gasoline. AAA road service and minor auto repair are available.

Lodgepole Market Gift Shop: Located in the center of the Lodgepole campground. Open from mid-May to September 6. Summer hours 8:30 a.m. to 7:00 p.m. Offers a wide selection of groceries, camper supplies, fishing equipment, firewood, ice and gift items.

KINGS CANYON NATIONAL PARK

GRANT GROVE

Accommodations: Open to October 25. Rustic cabins with and without private bath.

Reservations: Between May 1 and October 25 contact Grant Grove, telephone (209) 335-2314. During remainder of the year contact Giant Forest reservation office (209) 565-3373.

Coffee Shop: Open through October 26. Hours from 7:00 a.m. to 8:00 p.m.

Cocktail Lounge: Located in the Coffee Shop building. Open daily from 5:00 p.m. to 11:00 p.m.

Gift Shop: Open daily through October 26. Hours 9:00 a.m. to 7:00 p.m. Features, souvenirs, curios and selected handicrafts.

Market: Open through September 30, 8:00 a.m. to 8:00 p.m. Offers varied selection of groceries, camper supplies, fishing licenses and equipment, ice and magazines.

Chevron Service Station: Open all year. Summer hours 8:00 a.m. to 7:00 p.m. AAA road service and minor auto repair available.

CEDAR GROVE

Accommodations: Open mid-May through September. Hotel rooms with queen-size beds, air conditioning and handicapped facilities. Contact Giant Forest for reservations at (209) 565-3373.

Market: Open through September. Hours 8:00 a.m. to 8:00 p.m. Offers a varied selection of groceries, ice, camper supplies, fishing licenses and equipment.

Gift Shop: Offers a selection of souvenir and handicraft items. Hotel guest register at this location.

Snack Bar: Open from 7:00 a.m. to 8:00 p.m. Serves fast food menu for breakfast, lunch and dinner.

Gas Station: Open through September. Chevron unleaded, regular and supreme gasoline offered. AAA road service is from Grant Grove.

Showers and Bike Rentals: Public showers and bicycle rentals are available from the gas station. Hours from 8:00 a.m. to 5:00 p.m.

SEQUOIA NATIONAL FOREST

STONY CREEK

Stony Creek Village: Located adjacent to the Generals Highway midway between Giant Forest and Grant Grove. Facilities include modern motel type rooms, dining room, market, gift shop, and Chevron Service Station. Open May 12 through October 1. Also, facilities include laundry and showers.

BUS SERVICE

SEQUOIA AUTO STAGE

Daily Service, May 17 to September 14, connecting Giant Forest, Stony Creek and Grant Grove with air bus and rail terminals in Fresno.

Westbound:	
Lv. Giant Forest Lodge	10:00 a.m.
Lv. Stony Creek	10:30 a.m.
Lv. Grant Grove Lodge	11:00 a.m.
Ar. Fresno (Air Terminal)	12:20 p.m.
(Amtrak)	12:45 p.m.
(Greyhound)	1:05 p.m.
Eastbound	
Lv. Fresno (Greyhound	2:45 p.m.
(Amtrak)	2:55 p.m.
(Air Terminal)	3:15 p.m.
Ar. Grant Grove	4:55 p.m.
Ar. Stony Creek	5:20 p.m.
Ar. Giant Forest Lodge	6:00 p.m.

GIANT FOREST MOTOR TOUR

Daily Service May 17 through September 13. Two tours daily of the Giant Forest grove of the giant sequoia. Morning tour departs 7:45 a.m.; evening tour departs 6:00 p.m. Includes Sherman Tree, Moro Rock, and Crescent Meadow.

KINGS CANYON MOTOR TOUR

Daily Service May 17 through September 13. One tour daily departing Giant Forest Lodge at 10:00 a.m. Returns to Lodge at 5:30 p.m. Includes General Grant Grove, Kings River Canyon and Cedar Grove.

BUS RESERVATIONS

Bus reservations can be made at the Giant Forest Lodge Reservation Office (209-565-3373) or at other Sequoia and Kings Canyon Hospitality Service hotel desks in Kings Canyon National Park and Sequoia National Forest. Bus tours operation subject to minimum sign up requirement.

ADDITIONAL SERVICES

WILSONIA LODGE: Located within Wilsonia Village, 1 mile from Grant Grove Visitor Center. Accommodations, dining room, general store. Telephone (209) 335-2310.

SILVER CITY STORE AND CABINS: Located on Mineral King Road 4 miles west of Mineral King Ranger Station. Housekeeping cabins, meal service, groceries, limited gasoline service. Telephone Silver City No. 2.

U.S. POSTAL SERVICE

U.S. Post Offices are located at Lodgepole (Sequoia National Park, CA. 93262) and at Grant Grove (Kings Canyon National Park, CA. 93633). The Kings Canyon Post Office is only open during the summer.

LIBRARY

The Tulare County Free Library maintains circulating branches at the Lodgepole Visitor Center in Sequoia National Park and at the Grant Grove Visitor Center in Kings Canyon National Park. Employees and visitors alike are welcome to borrow books. Check locally for hours.

INFORMATION BY PHONE

Recorded current information message
(209) 565-3351 (Park Headquarters)
(415) 556-6030 (San Francisco)
(213) 688-2902 (Los Angeles)

EMERGENCY NUMBERS

Sequoia National Park (Ash Mountain)
565-3341
If no answer call 565-3326
Fire only 565-3444

Sequoia National Park (Giant Forest-Lodgepole)
565-3361
If no answer call 565-3455
Fire only 565-3618

Kings Canyon National Park (Grant Grove)
335-2511
If no answer call 335-2324
Fire only 335-2515

Kings Canyon National Park (Cedar Grove)
Cedar Grove No. 6
If no answer Cedar Grove No. 7 or No. 8

Sequoia National Forest
Hume Lake District Ranger Office
336-2881

CHURCH SERVICES

CHURCH OF THE SEQUOIAS — Interdenominational

	Sundays
Giant Forest Lodge Fire Circle	9:30 a.m.
Giant Forest Beetle Rock	6:30 p.m.
Lodgepole Amphitheater	9:30 a.m. 6:30 p.m.
Dorst Amphitheater	9:30 a.m.
Stony Creek Picnic Area	9:30 a.m.
Cedar Grove Amphitheater	9:30 a.m. 6:30 p.m.
Grant Grove Amphitheater	10:30 a.m. 6:30 p.m.
Silver City — Cabin Area	10:30 a.m.

EPISCOPAL

Camp San Joaquin	8:00 a.m.
(2 miles north of Stony Creek)	11:00 a.m.

SEVENTH DAY ADVENTIST

Grant Grove Amphitheater	
Sabbath School (Saturday)	10:00 a.m.
Worship (Saturday)	11:15 a.m.

CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS

Giant Forest Lodge Fire Circle	
Priesthood Meeting	12:30 p.m.
Sacrament Meeting	1:45 p.m.

CASH FOR CANS

A beverage container refund program is being sponsored this summer by Sequoia and Kings Canyon Hospitality Service, the park's concessioner host.

The concessioner will pay 5 cents for containers specially marked with their symbol. You can help by returning the containers to the markets at Giant Forest, Lodgepole, Grant Grove, Cedar Grove or the Stony Creek Village in Sequoia National Forest.

These recycle centers will be open during normal store hours to serve you.

This is part of a nationwide program to achieve a reduction in solid waste and litter, as well as to conserve production materials. Usable glass and metals, which require large amounts of energy to manufacture initially, can be recycled with much less energy requirements.

THE SEQUOIA BARK is provided as a service to Park Visitors. All comments and suggestions are welcome.
Sequoia Natural History Association
Ash Mountain Box 10
Three Rivers, CA 93271

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